UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,477	01/21/2004	Michael Wilhelm	Q79402	9812

23373 7590 09/13/2006

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER	
EKONG, EMEM	
ART UNIT	**PAPER NUMBER**
2617	

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/760,477	WILHELM, MICHAEL	
	Examiner	Art Unit	
	EMEM EKONG	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/5/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-3, and 5-10 are rejected under 35 U.S.C. 102(a) as being anticipated by UK Patent Application 2271486 A to Richardson.

Regarding claim 1, Richardson discloses a method of selecting at least one link adaptation parameter for a communication link between a mobile terminal and a network component of a wireless telecommunication network (page 5 lines 1-13, and page 7 lines 1-36), the method comprising the steps of: providing means for determining of a link adaptation parameter based on a geographic positions of the mobile terminal (controller that controls system in response to received signal strength and geographic position information, page 3 lines 1-23, page 4 lines 1-14, and page 9 lines 29-33), determining of a geographic position of the mobile terminal (page 2 lines 23-32, and page 11 lines 11-15), determining the link adaptation parameter for the communication link based on the geographic position of the mobile terminal (page 3 lines 1-23, page 4 lines 1-14, 24-35, page 7 lines 1-36, and page 11 lines 2-4).

Regarding claim 2, Richardson discloses the method of claim 1, the link adaptation parameter being a modulation and/or coding scheme from a set of

modulation and/or coding scheme (page 4 lines 1-14, and 24-35).

Regarding claim 3, Richardson discloses the method of claim 1, the means for determining of a link adaptation parameter being provided as a digital map which assigns the link adaptation parameters to geographic positions and/or regions (see figure 1, and page 11 lines 15-18).

Regarding claim 5, Richardson discloses a method of generating a database for assigning of link adaptation parameters to geographic positions (memory/database for storing information from received geographic position and associated received signal strength information used in making system change decision, page 3 lines 6-29, page 12 lines 23-25, and page 13 line 1- page 14 line 36), the method comprising the steps of: receiving of a link quality parameter from a mobile terminal (page 2 lines 33-36, and page 12 lines 2-13), determining of a geographical position of the mobile terminal (page 2 lines 23-32), determining of a link adaptation parameter based on the link quality parameter (controller that controls system in response to received signal strength and geographic position information, page 3 lines 1-23, page 4 lines 1-14, page 5 lines 1-13, page 9 lines 29-33, and page 13 lines 27-35), storing of the link adaptation parameter being assigned to the geographical position (see figure 1 and page 13 lines 1-35), repeating of steps a) to d) for a number of times (page 12 lines 23-29).

Regarding claim 6, Richardson discloses the method of claim 5, whereby the

steps a) to d) are repeated during a pre-determined time interval (page 12 lines 23-29).

Regarding claim 7, Richardson discloses a computer program product, in particular digital storage medium, for selecting a link adaptation parameter for a communication link between a mobile terminal and a network component of a wireless telecommunication network (page 5 line 23-page 6 line 34, it is inherent for a controller to have programmed instruction stored in its memory), comprising program means for performing the steps of: entering of a geographical position of the mobile terminal (page 6 lines 4-7, and page 12 lines 23-29), performing a database query in a database which stores link adaptation parameters being assigned to geographical positions in order to determine the link adaptation parameter of the geographical position of the mobile terminal, outputting of the link adaptation parameter (page 4 lines 1-14, page 5 lines 1-13, page 6 lines 7-16, page 9 lines 29-33, page 13 lines 27-35, and page 14 lines 1-20, controller administers control based on comparison of information obtained from memory).

Regarding claim 8, Richardson discloses a computer program product, in particular digital storage medium (page 5 line 23-page 6 line 34, it is inherent for a controller to have programmed instruction stored in its memory), for generating of a database for assigning of link adaptation parameters to geographical positions (memory/database for storing information from received geographic position and associated received signal strength information used in making system change

decision, page 3 lines 6-29, page 12 lines 23-25, and page 12 line 23- page 14 line 36), comprising program means for performing the steps of: entering of a geographical position of a mobile terminal (page 6 lines 4-7, and page 12 lines 23-29), entering of a link adaptation parameter which has been determined for a communication link between the mobile terminal and a network component of a wireless telecommunication network, storing of the link adaptation parameter with the assigned geographical position for later retrieval using a geographical position as a key (page 13 line 1- page 14 line 36).

Regarding claim 9, Richardson discloses a network component of the wireless telecommunication network (see figure 1), the network component comprising: means for entering of a geographical position of a mobile terminal (page 6 lines 4-7, and page 12 lines 23-29), means for performing a database query in a database storing link adaptation parameters being assigned to geographical positions using the geographical position of the mobile terminal as a key in order to determine the link adaptation parameter for a communication link to the mobile terminal in the wireless telecommunication network (page 4 lines 1-14, page 5 lines 1-13, page 6 lines 7-16, page 9 lines 29-33, page 13 lines 27-35, and page 14 lines 1-20, controller administers control based on comparison of information obtained from memory).

Regarding claims 10, Richardson discloses a telecommunication network for establishing a communication link between a mobile terminal and a network component (see figures 1 and 2), the communication link having a link adaptation parameter (page

2 lines 33-36), the telecommunication network comprising: database means for storing of link adaptation parameters being assigned to geographical positions (page 3 lines 6-9, and page 12 lines 23-29, memory/database), means for determining of a geographical position of the mobile terminal (page 2 lines 23-32, GPS means), means (page 3 lines 9-16, and page 6 lines 7-34, computation/comparison means) for determining of the link adaptation parameter for the telecommunication link based on the geographical position by querying the database using the geographical position of the mobile terminal as a key (page 4 lines 1-14, page 5 lines 1-13, page 6 lines 7-16, page 9 lines 29-33, and page 13 line 1-page 14 line20, controller administers control based on comparison of information obtained from memory).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of European Patent Application No. 1037482 A2 to Kazunori et al. (Kazunori).

Regarding claim 4, Richardson discloses the method of claim 1,however, Richardson fails to specifically disclose further comprising: predicting of a future geographic position of the mobile terminal based on geographic positions of the mobile terminal which have been determined previously, determining a future link adaptation parameter for the predicted geographic position.

Kazunori discloses predicting of a future geographic position of the mobile terminal based on geographic positions of the mobile terminal which have been determined previously, determining a future link adaptation parameter for the predicted geographic position (pars. 35-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Richardson, by predicting of a future geographic position of the mobile terminal based on geographic positions of the mobile terminal which have been determined previously, determining a future link adaptation parameter for the predicted geographic position as disclosed by Kazunori for the purpose of determining specification for the predicted position.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM EKONG whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571 272 7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EOE
09/06/2006

LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER